# Candidate Information Packet

# Arkansas Computer Science and Computing Educator Academy

# 2021-2023
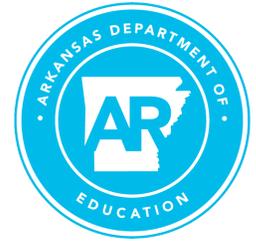
# Arkansas Computer Science and Computing Educator Academy 2021-2023

As part of the Arkansas Computer Science and Computing Initiative, which was founded by Governor Asa Hutchinson, the Arkansas Department of Education (ADE) Office of Computer Science is pleased to announce its planned creation of a **Computer Science and Computing Educator Academy (CSCEA)**, scheduled for Monday through Friday of the weeks of June 14-18 & June 21-25, 2021.

The CSCEA, which will begin in the summer of 2021, will provide another option for Arkansas residents to:
- Learn basic computer science, which provides a starting point for new teachers to be successful,
- Receive preparation for passing the Computer Science Content Knowledge Praxis exam,
- Gain approval to teach high school computer science courses,
- Earn postsecondary credits for academy completion, and
- Expand skills in specialized areas aligned to state-adopted programs of study.

## Training Components

The CSCEA will consist of each candidate gaining 90 hours of computer science and computing (CSC) training that is aligned to that candidate's needs and desires.

The primary training is 60 hours of content that is designed, and required, for all candidates who have not yet passed the Computer Science Content Knowledge Praxis exam.

**This training, provided by the ADE Office of Computer Science, is scheduled for Monday through Friday of the weeks of June 14-18 & June 21-25, 2021.**
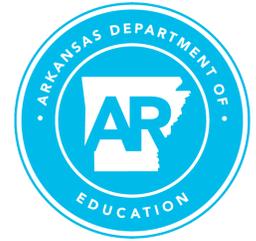
The physical location of the training will be announced once a public university partner is selected; however, digital options for participation will be made available.

The contents of the training will, at minimum, consist of:
- An overview of CSC Initiative, including the importance of CSC,
- An examination of state-provided resources and requirements both regulatory and legislative,
- A broad examination of the scope and sequencing of the content within the K-8 computer science standards,
- A broad examination of the approved high school pathways and Division of Career and Technical Education (DCTE) approved programs of study found at: https://bit.ly/CSforARPoS2021,
- Information on active steps to broaden upper-level participation in computing and computer science amongst underserved populations, especially female students,
- Computer science and computing concepts and instructional strategies for standards within the ADE Computer Science and Computing year one standards found at: https://bit.ly/ARCSCourses,
- Additional concepts that are found on the computer science Praxis, but not part of the Arkansas Computer Science and Computing year one standards, and

- Strategies and resources for passing the Computer Science Content Knowledge Praxis exam.

The secondary training options, which the candidate may select based on their needs and/or interests, are 30 hours each. These secondary training options will be provided digitally by the ADE Office of Computer Science or partners/trainers selected by the ADE Office of Computer Science.

Secondary training options for the summer of 2021 may include (July dates to be announced):
- Cybersecurity - Year 2 and Year 3 Standards Alignment
- Game Development and Design - Year 2 and Year 3 Standards Alignment
- Mobile Application Development - Year 2 and Year 3 Standards Alignment
- Networking - Year 2 and Year 3 Standards Alignment
- Programming - Year 2 and Year 3 Standards Alignment
- Robotics - Year 2 and Year 3 Standards Alignment

Additional secondary training options under consideration for launch in the summer of 2021 or summer of 2022 (as available) include:
- Artificial Intelligence & Machine Learning - Year 2 and Year 3 Standards Alignment
- Computer Engineering - Year 2 and Year 3 Standards Alignment
- Data Science - Year 2 and Year 3 Standards Alignment
- Select advanced programming training provided by the Arkansas School for Mathematics, Sciences, and the Arts

A candidate who enters the program that has already passed the Computer Science Content Knowledge Praxis exam and added the 528 Computer Science endorsement to their Arkansas Educators License, will be allowed to take three different secondary training options to meet the 90-hour requirement.

### Participant Selection
The CSCEA is restricted to Arkansas residents who are either employed by an Arkansas public school district or intend to teach within an Arkansas public school district and have a letter of support from a Superintendent of an Arkansas Public School District. Up to 100 candidates will be accepted for each of the summer 2021, summer 2022, and summer 2023 cohorts (up to 300 total candidates).

Candidate selection may be prioritized based on regional needs and for districts that are classified as high-poverty.

Interested candidates may apply at: https://www.surveymonkey.com/r/CSforARAcademyApp

## CSCEA Participant Certification, Credit, and/or Grades

Upon completion of the 90-hour program, if other required criteria is met, ADE may issue the participant one of the following:

- 5016 Computer Science Approval Code for individuals who already hold an Arkansas Educator's License,
- 5014 Computer Science Technical Permit for individuals who have 4 years of work experience in a computer science and computing (or related) field, or
- 5013 Computer Science Technical Permit for Classified Staff who have at least 1 year of direct student involvement work experience in a public school district.

Participants receiving a 5013 or 5014 technical permit must enter and complete a school-based mentoring program to support them in their new roles.

Candidates who successfully complete the 90-hour program may also earn up to 6 graduate-level credits in computer science and/or education awarded by an Arkansas public university, to be announced. The university expense for these credits will be paid for by ADE.

## Candidate/Participant Responsibilities

Any Arkansas resident interested in participating in the summer 2021 CSCEA must submit a fully completed application using the portal found at: https://www.surveymonkey.com/r/CSforARAcademyApp by 11:59 p.m. on May 1, 2021.

For all digital portions of the CSCEA, the participant must have at minimum a computer (with webcam) and high-speed internet that can reliably maintain connectivity and effectively communicate using Zoom through both video and audio. Access to other programs, applications, and systems may be required for specialized secondary training options. This information will be communicated to applicants who indicate interest in areas that require additional resources.

For all in-person participation of the CSCEA, the participant is required to have at minimum a computer that can connect reliably to wireless internet (WiFi), have administrator rights to install applications/programs as needed and access various online development/testing environments and resources.

Selected participants, or their sponsoring district, will be responsible for their own travel expenses including, but not limited to, mileage, gas, meals not provided by the CSCEA, and lodging.

Individuals that would not be able to participate unless these costs are covered, will be able to submit a request for travel funding through the application portal; however, funding for these purposes will be limited and assigned to individuals, districts, and regions with the greatest need.